

**IN THE CLAIMS:**

Cancel claims 1-17 and replace them with the following new claims:

*Supp*  
*18*  
-- 18. A transdermal therapeutic system comprising a self-adhesive matrix layer containing (-)-5,6,7,8-tetrahydro-6-[propyl-1[2-(2-thienyl) ethyl]amino]-1-naphthalenol in an effective amount wherein the matrix is based on a non-aqueous, acrylate-based or silicone-based polymer adhesive system having a solubility of  $\geq 5\%$  (w/w) for (-)-5,6,7,8-tetrahydro-6-[propyl-[2-(2-thienyl) ethyl]-amino]-1-naphthalenol, and wherein said matrix is substantially free of inorganic silicate particulates; a backing layer inert to the components of the matrix layer; and a protective foil or sheet covering the matrix layer to be removed prior to use.

19. The transdermal therapeutic system of claim 18 further comprising  $< 0.5\%$  (w/w) inorganic silicate particulates in the matrix layer.

20. The transdermal therapeutic system of claim 18 further comprising  $< 0.05\%$  (w/w) inorganic silicate particulates in the matrix layer.

21. The transdermal therapeutic system of claim 18 wherein the acrylate-based polymer adhesive in the matrix layer contains at least two monomers selected from the group of acrylic acid, acrylamide, hexylacrylate, 2-ethylhexylacrylate, hydroxyethylacrylate, octylacrylate, butylacrylate, methylacrylate, glycidylacrylate, methacrylic acid, methacrylamide, hexylmethacrylate, 2-ethylhexylmethacrylate, octylmethacrylate, methylmethacrylate, glycidylmethacrylate, vinylacetate and vinylpyrrolidone.

22. The transdermal therapeutic system of claim 18 wherein the silicone-based polymer adhesive in the matrix layer further comprises additives to enhance the solubility of (-)-5,6,7,8-tetrahydro-6-[propyl-[2-(2-thienyl) ethyl]amino]-1-naphthalenol in the form of hydrophilic polymers or glycerol or glycerol derivatives.

23. The transdermal therapeutic system of claim 21 wherein the acrylate-based polymer contains between 10 to 40% (w/w) (-)-5,6,7,8-tetrahydro-6-[propyl-[2-(2-thienyl) ethyl]-amino]-1-naphthalenol.

24. The transdermal therapeutic system of claim 22 wherein the silicone-based polymer adhesive contains between 5 to 25%

(w/w) (-)-5,6,7,8-tetrahydro-6-[propyl-[2-(2-thienyl) ethyl]-amino]-1-naphthalenol.

25. The transdermal therapeutic system of claim 23 further comprising substances which enhance the permeation of (-)-5,6,7,8-tetrahydro-6-[propyl-[2-(2-thienyl) ethyl]amino]-1-naphthalenol into the human skin.

26. The transdermal therapeutic system of claim 24 further comprising substances which enhance the permeation of (-)-5,6,7,8-tetrahydro-6-[propyl-[2-(2-thienyl) ethyl]amino]-1-naphthalenol into the human skin.

27. The transdermal therapeutic system of claim 25 wherein the permeation-enhancing substance is selected from the group of fatty alcohols, fatty acids, fatty acid esters, fatty acid amides, glycerol or its derivatives, N-methyl-pyrrolidone, terpenes, and terpene derivatives.

28. The transdermal therapeutic system of claim 26 wherein the permeation-enhancing substance is selected from the group of fatty alcohols, fatty acids, fatty acid esters, fatty acid amides, glycerol or its derivatives, N-methyl-pyrrolidone, terpenes, and terpene derivatives.

29. The transdermal therapeutic system of claim 27 wherein the permeation-enhancing substance is oleic acid or oleyl alcohol.

30. The transdermal therapeutic system of claim 28 wherein the permeation-enhancing substance is oleic acid or oleyl alcohol.

31. The transdermal therapeutic system of claim 22, wherein the hydrophilic polymer is selected from the group of polyvinylpyrrolidone, a copolymer of vinylpyrrolidone and vinylacetate, polyethyleneglycol, polypropylene glycol, and a copolymer of ethylene and vinylacetate.

32. The transdermal therapeutic system of claim 31 wherein the hydrophilic polymer is soluble polyvinylpyrrolidone, and wherein the soluble polyvinylpyrrolidone is present in the active substance-containing matrix layer at a concentration of between 1.5 and 5% (w/w).

33. The transdermal system of claim 18 wherein the matrix further comprises inert fillers to improve cohesion.

34. A process for preparing a transdermal therapeutic system, comprising the steps of:

i. mixing a suspension of (-)-5,6,7,8-tetrahydro-6-[propyl[2-(2-thienyl) ethyl]amino]-1-naphthalenol hydrochloride in ethanol with an alkaline compound in ethanol to convert the hydrochloride into the free base;

ii. adding polyvinylpyrrolidone and a solution of an adhesive and

iii. drying the product.

35. The process of claim 34 further comprising the step of filtering the resultant suspension in step i.

36. The process of claim 34 wherein the alkaline compound is sodium hydroxide or potassium hydroxide.

37. The process of claim 34 wherein the alkaline compound is sodium metasilicate or potassium metasilicate.

38. The process of claim 34 wherein the alkaline compound is sodium trisilicate or potassium trisilicate.

39. The process of claim 34 wherein the mixture is spread on an inert backing layer or protective foil or sheet in such a manner as to produce a uniform film prior to drying the product.

40. A product made in accordance with the process of claim 34.